Attorney Docket No. DOGO.P014

In the Claims

Please amend the claims as follows.

1   Claim 1 (canceled).

1   2.   (Currently amended) An apparatus comprising at least one processor coupled to:
2   means for receiving an original file and a new file, wherein the new file includes
3   an updated version of the original file;
4   means for determining an order of code blocks of the new file using index values;
5   means for sorting code blocks of the original file and generating a largest
6   increasing subsequence (LIS) of code blocks according to the index values;
7   means for generating lists of original order numbers of the code blocks of the
8   original file affected by code block movements; and
9   means for moving the code blocks of the original file to locations in the original
10   file according to the largest increasing subsequence of code blocks, wherein the code
11   blocks of the original file are aligned in the same order as code blocks of the new file.

1   3.   (Currently amended) A system for updating electronic files of remote devices,
2   comprising:
3   a first device including a processor coupled to a file differencing engine that
4   generates differences between an original version and a new version of an electronic file
5   by:
6   determining an order of code blocks of the new version using index
7   values;
8   sorting code blocks of the original version and generating a largest
9   increasing subsequence (LIS) of code blocks according to the index values;
10   generating lists of original order numbers of the code blocks of the
11   original version affected by code block movements;
12   moving the code blocks of the original version to locations in the original
13   version according to the largest increasing subsequence of code blocks, wherein

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14   the code blocks of the original version are aligned in the same order as code

15   blocks of the new version;

16   generating an encoded list including information of the code block moves;

17   transmitting the encoded list to a second device; and

18   a file updating engine ~~hosted on~~coupled to a processor of the second device, the

19   file updating engine generating a copy of the new version using a difference file and

20   information of the code block moves.

1   4.   (Original)   The system of claim 3, wherein the second device includes at least

2   one of cellular telephones, portable communication devices, personal digital assistants,

3   personal computers, and portable processor-based devices.

1   5.   (Currently amended) A method for generating difference files on a processor-

2   based device, comprising:

3   receiving an original file and a new file, wherein the new file includes an updated

4   version of the original file;

5   determining an order of code blocks of the new file using index values;

6   sorting code blocks of the original file and generating a largest increasing

7   subsequence (LIS) of code blocks according to the index values;

8   generating lists of original order numbers of the code blocks of the original file

9   affected by code block movements;

10   moving the code blocks of the original file to locations in the original file

11   according to the largest increasing subsequence of code blocks, wherein the code blocks

12   of the original file are aligned in the same order as code blocks of the new file; and

13   generating an encoded list including information of the code block moves.

1   6.   (Original)   The method of claim 5, further comprising:

2   generating mappings between code blocks of the original file and corresponding

3   code blocks of the new file; and

4   generating a mapping array using information of the mappings.

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1   7.   (Original)   The method of claim 6, further comprising:

2   generating a longest increasing subsequence (LIS) of the mapping array;

3   identify membership of the LIS for each code block of the original file; and

4   generating a membership array using information of the LIS membership.

1   8.   (Original)   The method of claim 5, further comprising receiving at least one of

2   a mapping array, a membership array, a start address array, a size array, and an original

3   code block order number array, wherein the mapping array includes information of

4   mappings between code blocks of the original file and corresponding code blocks of the

5   new file, wherein the membership array includes information of a membership of a

6   longest increasing subsequence (LIS) for each code block of the original file, wherein the

7   start address array includes information of code block start addresses, wherein the size

8   array includes information of code block sizes, and wherein the original code block order

9   number array includes information of the original order of code blocks in the original file

10 prior to the code block movements.

1   9.   (Original)   The method of claim 5, further comprising:

2   transferring the encoded list to at least one remote system via at least one

3   coupling, wherein the remote system includes at least one processor-based system,

4   wherein the coupling includes at least one of a wireless coupling, a wired coupling, and a

5   hybrid wireless/wired coupling; and

6   updating a hosted copy of the original file in the remote processing systems using

7   a difference file and the encoded list.

1   10. (Currently amended) A method for reducing a number of changes between an

2   original file and a new file on a processor-based device, comprising:

3   determining an order of code blocks of the new file using index values;

4   sorting code blocks of the original file and generating a largest increasing

5   subsequence (LIS) of code blocks according to the index values;

6   generating at least one list of original order numbers of the code blocks of the

7   original file affected by code block movement; and

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8   moving the code blocks of the original file to locations in the original file

9   according to the largest increasing subsequence of code blocks, wherein the code blocks

10   of the original file are aligned in the same order as code blocks of the new file.

1   11.   (Allowed)   A computer readable medium including executable instructions

2   which, when executed in a processing system, reduce a number of changes between an

3   original file and a new file by:

4   determining an order of code blocks of the new file using index values;

5   sorting code blocks of the original file and generating a largest increasing

6   subsequence (LIS) of code blocks according to the index values;

7   generating lists of original order numbers of the code blocks of the original file

8   affected by code block movements; and

9   moving the code blocks of the original file to locations in the original file

10   according to the largest increasing subsequence of code blocks, wherein the code blocks

11   of the original file are aligned in the same order as code blocks of the new file.

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